



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,411	05/11/2005	Michio Tsuyumoto	3273-0202PUS1	4477
2292	7590	12/31/2009	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			DESAI, ANISH P	
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			1794	
NOTIFICATION DATE		DELIVERY MODE		
12/31/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/534,411	TSUYUMOTO ET AL.	
	Examiner	Art Unit	
	ANISH DESAI	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09/02/09.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9 is/are pending in the application.
 - 4a) Of the above claim(s) 1-3 is/are withdrawn from consideration.
- 5) Claim(s) is/are allowed.
- 6) Claim(s) 4-9 is/are rejected.
- 7) Claim(s) is/are objected to.
- 8) Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. .
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. <u> </u> .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u> </u> .	6) <input type="checkbox"/> Other: <u> </u> .

DETAILED ACTION

1. Applicant's arguments in response to the Office action mailed on 06/12/09 have been fully considered. Support for amendment to claims 4 and 5 is found in the specification as originally filed (e.g. see page 4 of the specification). Claims 10-19 are cancelled.
2. In view of applicant's amendment to claim 5, a new objection to claim 5 is made.
3. In view of applicant's amendment and response, the 35 USC section 112-second paragraph rejections are withdrawn.
4. The 35 USC Section 112-first paragraph rejections are maintained, except for the 35 USC Section 112-first paragraph rejections as set forth on page 6, paragraph (E) of 06/12/09 Office action, which are withdrawn in view of applicant's amendment and response.

Claim Objections

5. Claim 5 is objected to because of the following informalities: newly amended claim 5 recites "...and the ratio of C¹/C² of C¹ to C² is in the range of 0.7 to 1.5". This limitation is already recited in claim 5 at first instance, as such the Examiner suggests deletion of "the ratio of C¹/C² of C¹ to C² is in the range of 0.7 to 1.5" that appears after recitation "ratio C/D of C to D is in the range of 0.7 to 1.5".

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 4-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(A) With respect to the claim limitation “average surface pore size A of 0.7 to 10 μm ” and “an average pore size A^1 of 0.7 to 10 μm at one surface, an average pore size A^2 of 0.7 to 10 at the other surface”, while there is the support to recite that the “average surface pore size A^1 of 0.1 to 10 μm ”, there is no support to recite the range of the average surface pore size of 0.7 to 10 μm . While Table 1-1 in the specification show the lower end of the claimed range (i.e. 0.7 μm), the Examiner submits that this is one data point that is specific to a particular example (e.g. Ex. 2). As such the Examiner suggests replacing “0.7 to 10 μm ” with “0.1 to 10 μm ”. These limitations are found in claims 4 and 5.

(B) Regarding the limitation "an average surface porosity C of from 50% to 80%", while there is the support to recite the average surface porosity of "48% or more (e.g. 48% to 80%) and preferably from about 60% to about 80%", there is no support to recite "an average surface porosity C of from 50% to 80%". On page 8 of applicant's amendment, applicant has stated that aforementioned limitation is supported at Table 1-1 at page 30 and lines 5-8 on page 12. The Examiner respectfully disagrees, because Table 1-1 shows only individual data point with respect to the porosity and there is no support to recite the entire range of porosity as claimed in Table 1-1 and on page 12 lines 5-8 as asserted by applicant. These limitations are found in claims 4 and 5.

(C) With respect to the limitation "a maximum inside pore size is 5.1 μm or less", the Examiner submits that there is no support to recite said limitation. While Table 1-1 show individual data points representing the maximum pore size, there is no support to recite the broad claim limitation of "a maximum inside pore size is 5.1 μm or less" since said limitations would encompass values such as 0.1, 0.15, 0.17 μm etc. for which for which there is no support. These limitations are found in claims 4 and 5.

(D) With respect to the limitation "the average surface porosity C has an average porosity C^1 of from 50% to 80% at one surface and an average porosity C^2 of from 50% to 80% at the other surface", contrary to applicant's assertion, Table 1-1 and page 12 lines 5-8 of the specification fails to provide the support for said limitation. While there is the support to recite "the average surface porosity of "48% or more (e.g. 48% to 80%)

and preferably from about 60% to about 80%”, there is no support to recite the aforementioned limitation. These limitations are found in claims 4 and 5.

Response to Arguments

7. Applicant's arguments filed on 09/02/09 have been fully considered but they are not persuasive.
8. With respect to applicant's arguments on pages 7-11 of 09/02/09 amendment regarding the average surface pore size, an average pore size at one surface and an average pore size at the other surface, the Examiner submits that while he appreciates applicant's detailed analysis of case laws cited in applicant's response, however the Examiner respectfully disagrees for following reasons:
9. It is submitted that the *Wertheim* case law is not applicable to present situation, because in *Wertheim*, the issue was relating to the concentration of coffee solids. Hence, there was only one variable that was at issue (i.e. coffee solids), however in the presently claimed invention, while the Table 1-1 in the specification show the lower end of the claimed range (i.e. 0.7 μ m), the Examiner submits that this is one data point that is specific to a particular example (e.g. Ex. 2). In other words, 0.7 μ m (average pore size at one surface) is for a particular porous film of Example 2 which has specific

maximum pore size (1.8 μm), average rate of hole area C¹ (50%), pore size A² and so on as cited in Table 1-1 in the specification. It is submitted that applicant is attempting to extrapolate the entire range (i.e. 0.7 μm to 10 μm) by citing single data point of 0.7 μm , for which there is no support. Further, the average pore size of 0.7 microns in Table 1-1 corresponds to average pore size achieved using specific polymers, i.e. amide-imide polymer and polyvinyl pyrrolidone, cast onto specific substrate, i.e. polypropylene. As such, while there is support to recite average pore size of 0.7 microns for porous film obtained from those specific polymers cast onto that specific substrate, there is no support to recite such pore size for the broader disclosure of porous film set forth in the present claims.

10. With respect to the Blaser case law, it is submitted that *In re Blaser* cited by applicants is not applicable to the present situation given that while in this case the courts stated that applicants had support to recite 80-200 C based on a disclosure of 60-200 C, in this case (unlike the present situation), there was a broad disclosure of mixing (not in the examples) at temperature of up to 80 C.

11. With respect to applicant's arguments on page 11 of the amendment regarding "an average surface porosity C of from 50% to 80%", it is noted that applicant has incorporated same arguments as set forth previously with respect to the limitation of the average surface pore size, an average pore size at one surface and an average pore size at the other surface, in response the Examiner incorporates his comments as set

forth above here by reference. Additionally, the Examiner again notes that Table 1-1 shows only individual data point with respect to the porosity and there is no support to recite the entire range of porosity as claimed in Table 1-1 and on page 12 lines 5-8 as asserted by applicant.

12. With respect to applicant's arguments on page 11 of the amendment regarding "a maximum inside pore size is 5.1 μm or less", it is noted that applicant has incorporated same arguments as set forth previously with respect to the limitation of the average surface pore size, an average pore size at one surface and an average pore size at the other surface, an average surface porosity, in response the Examiner incorporates his comments as set forth above here by reference. Additionally, it is submitted that while Table 1-1 in applicant's specification show individual data points representing the maximum pore size, there is no support to recite the broad claim limitation of "a maximum inside pore size is 5.1 μm or less" since said limitations would encompass values such as 0.1, 0.15, 0.17 μm etc. for which for which there is no support.

13. It is noted that on page 12 of the amendment, with respect to claim limitation of average porosity C^1 and C^2 , applicant has incorporated same arguments that are previously made for claim limitation of average surface porosity C, in response the Examiner incorporates his comments as set forth above here by reference.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH DESAI whose telephone number is (571)272-6467. The examiner can normally be reached on Monday-Friday, 9:00AM-5:30PM.
17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. D./
Examiner, Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794